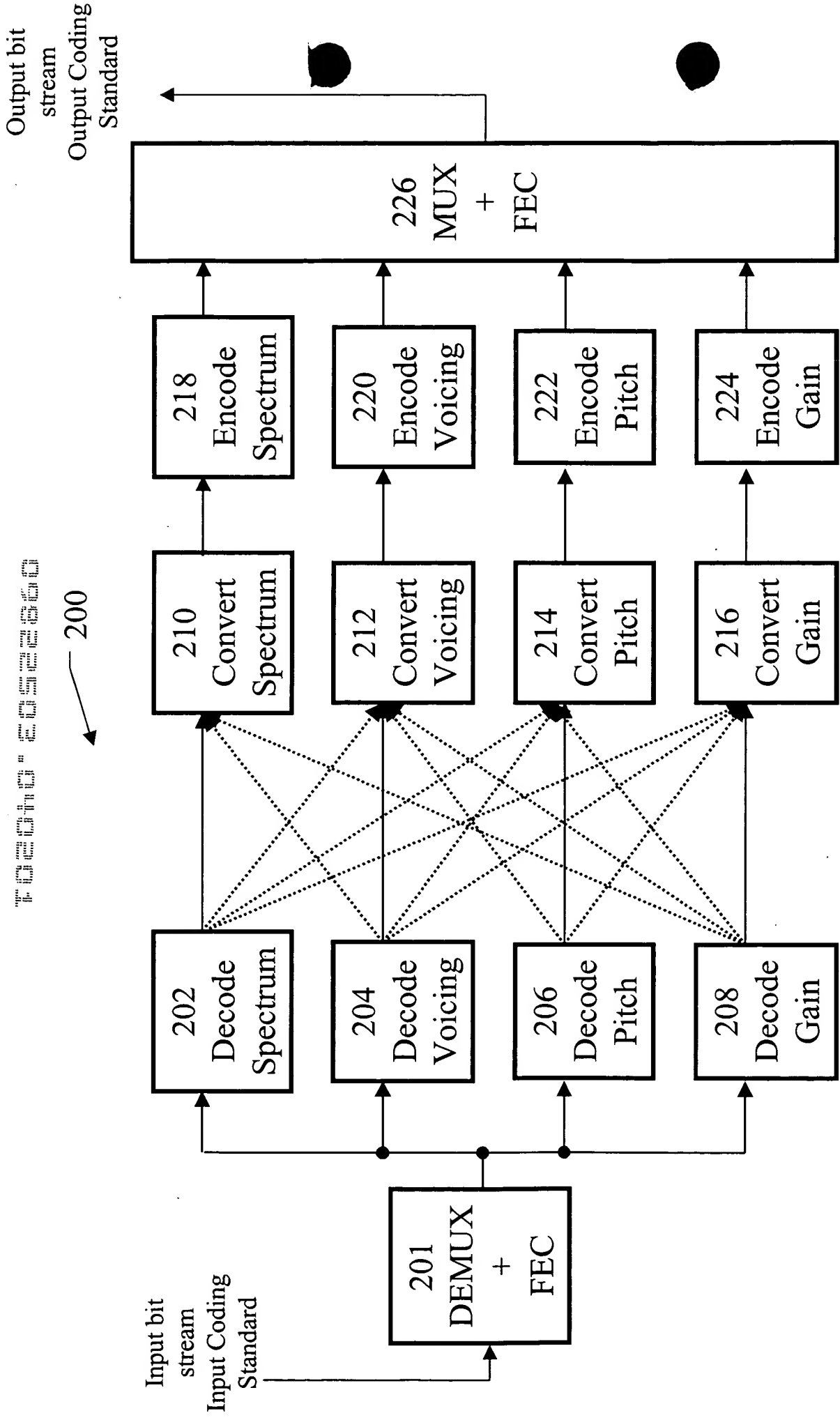


**Figure 1: (Prior Art) Tandem Connection**



**Figure 2: Universal Transcoder**

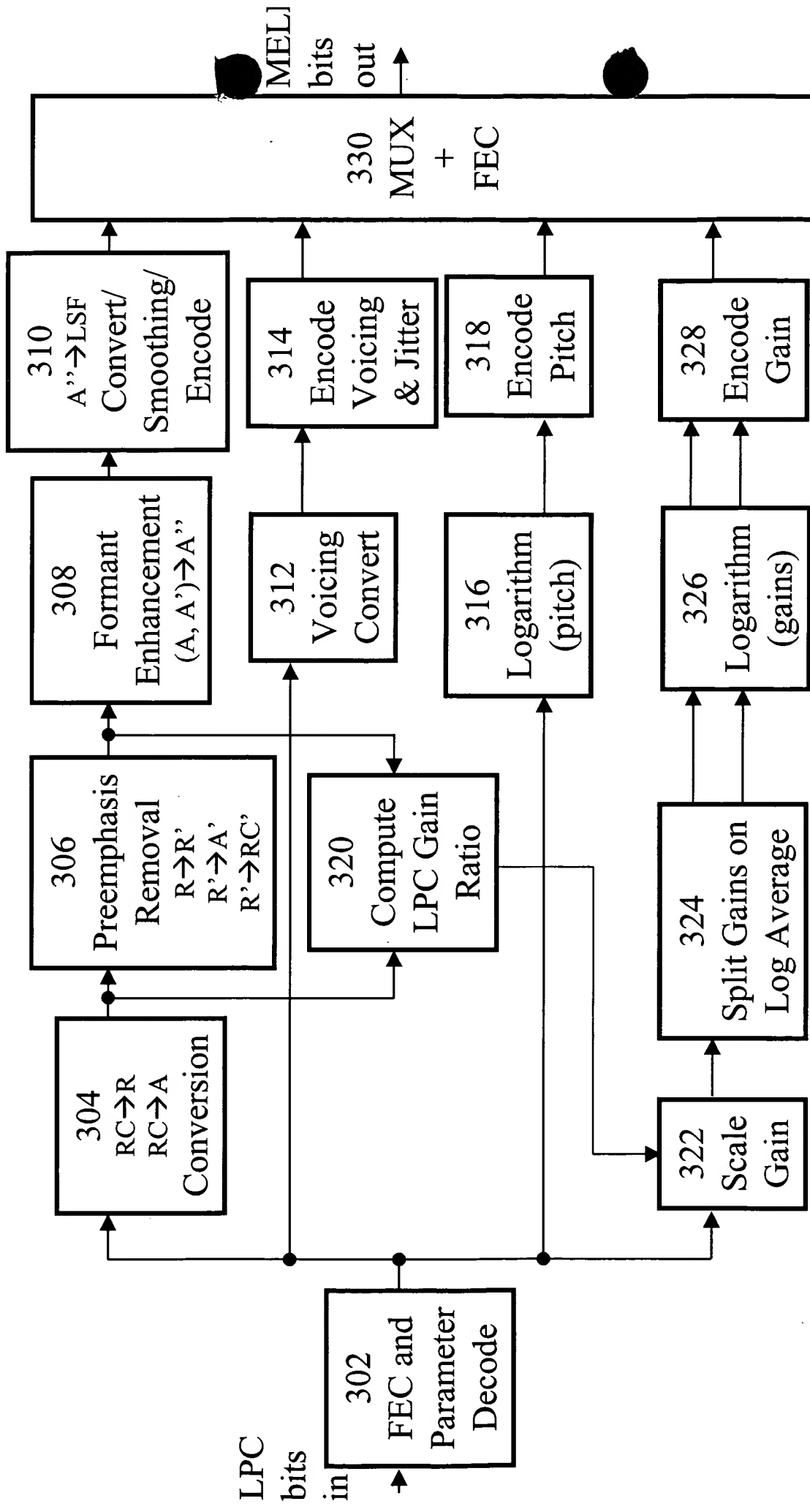


Figure 3: LPC to MELP Transcoder

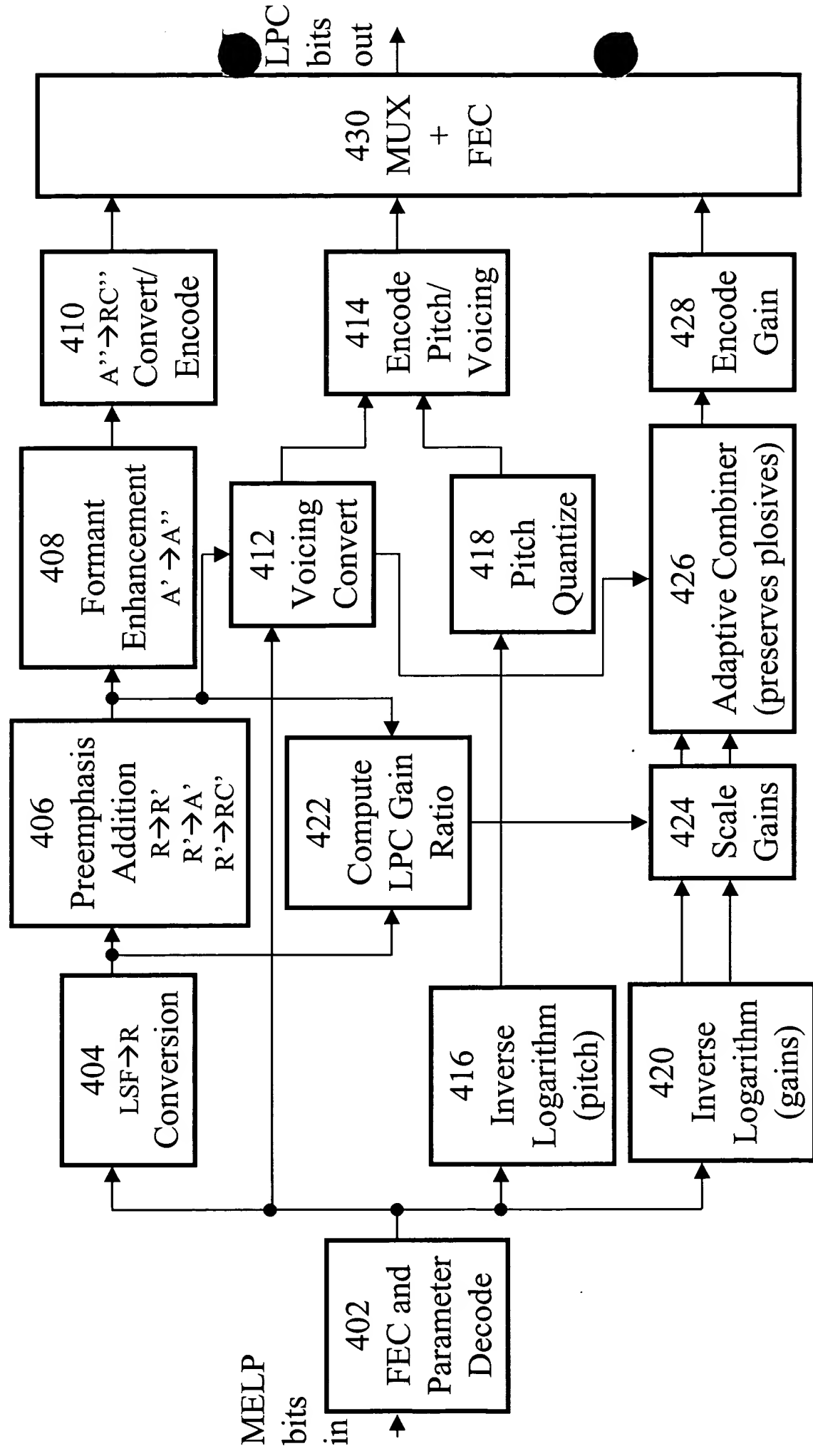


Figure 4: MELP to LPC-10 Transcoder

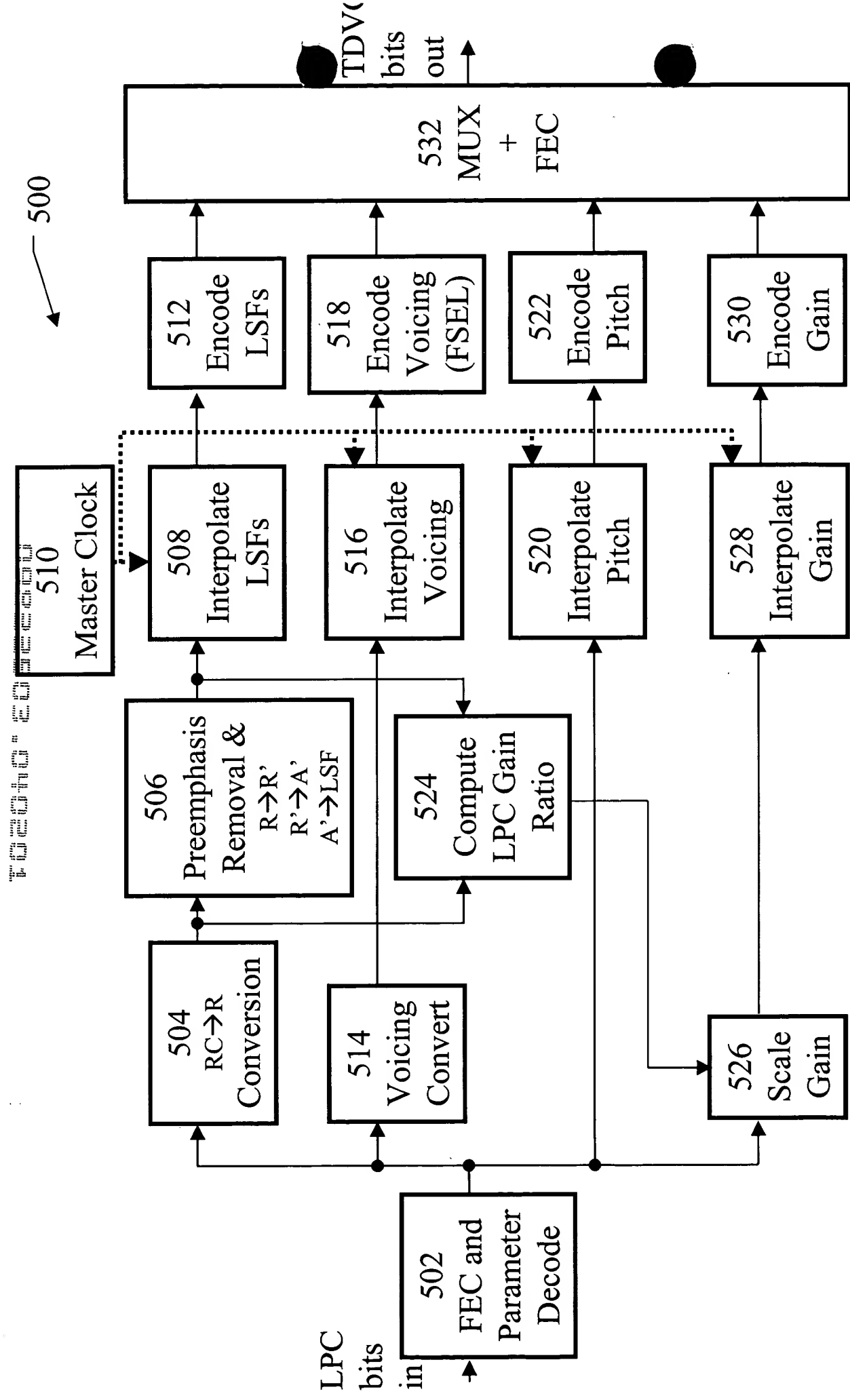
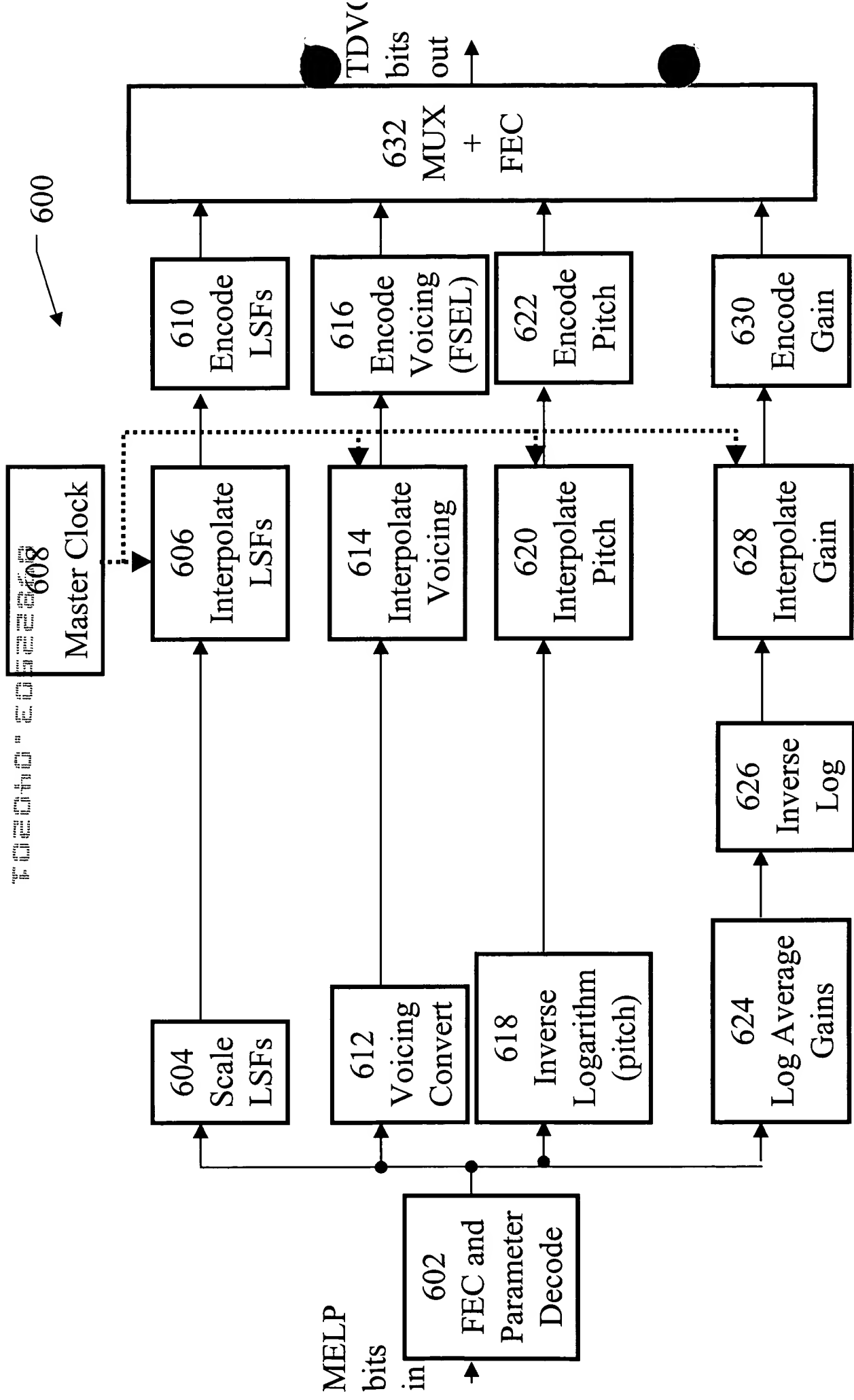


Figure 5: LPC-10 to TDVC Transcoder



**Figure 6: MELP to TDVC Transcoder**

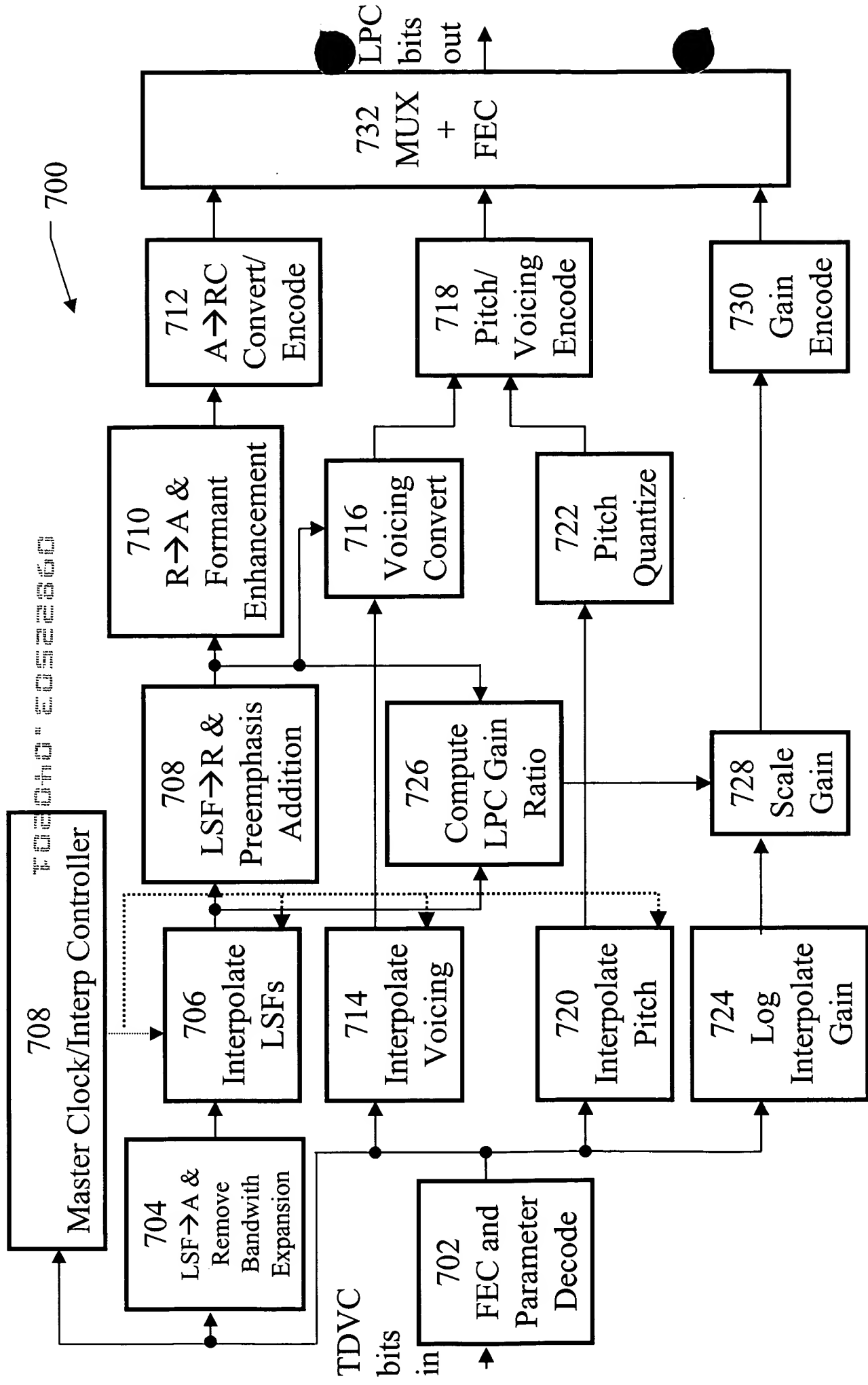
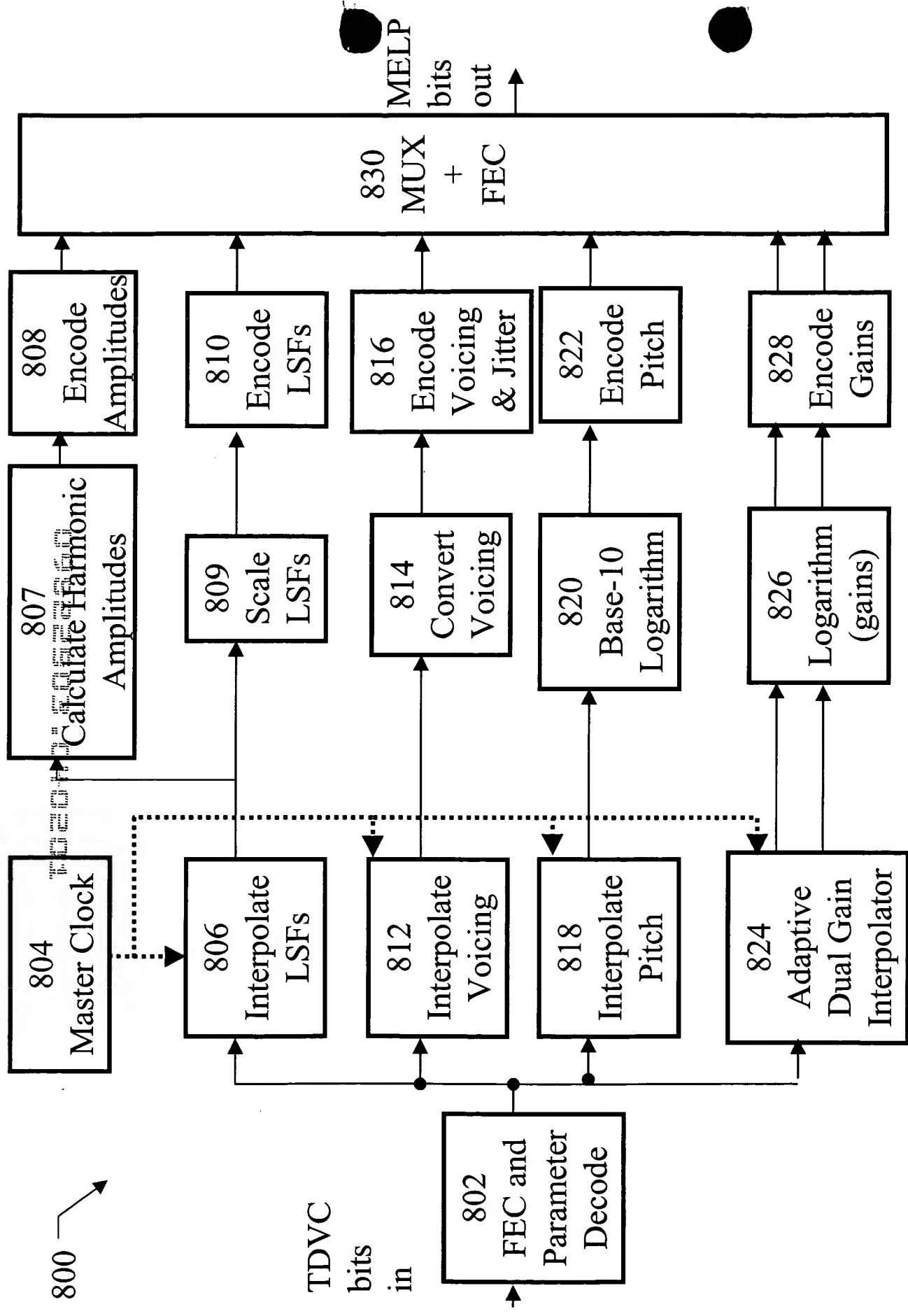
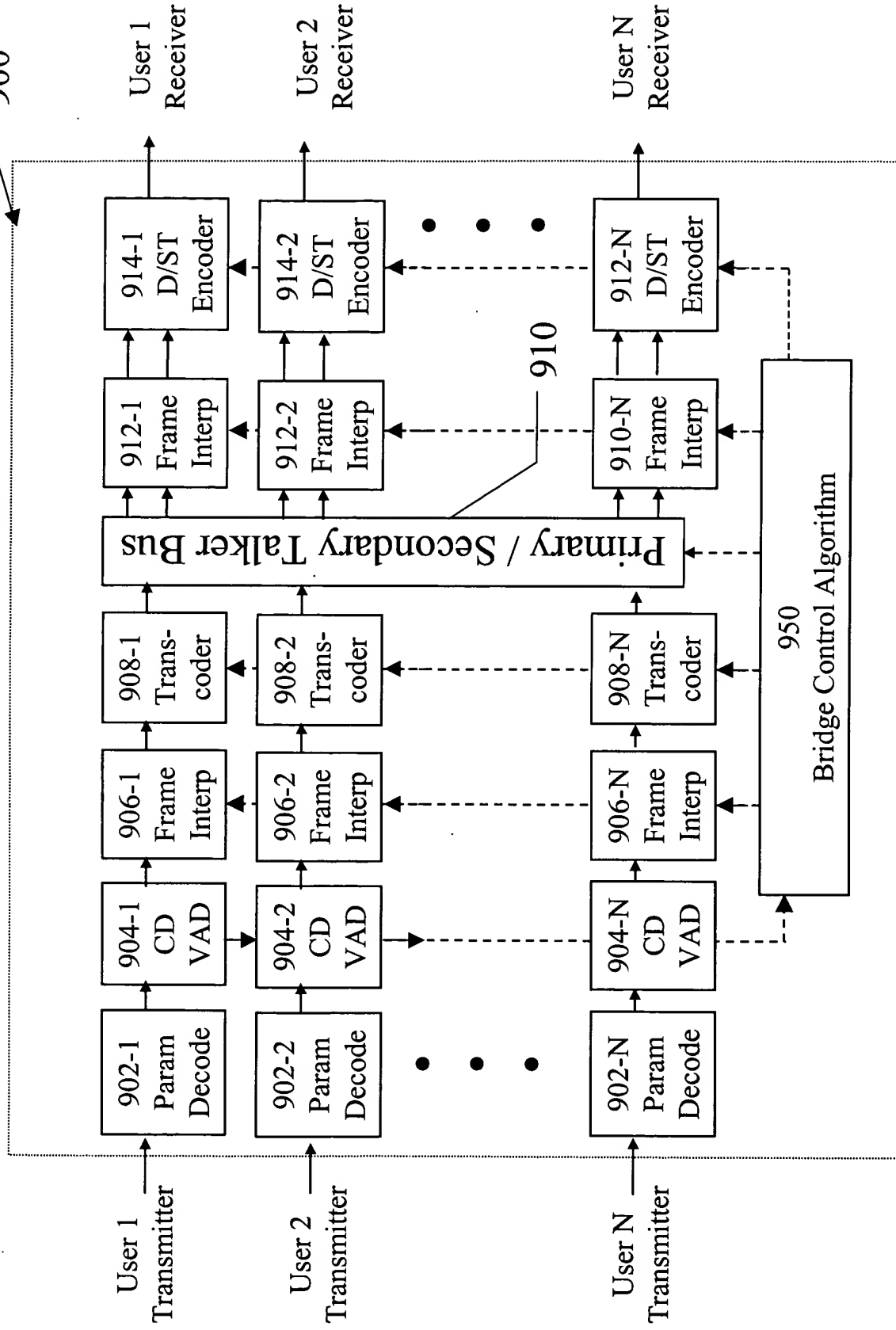


Figure 7: TDVC to LPC-10 Transcoder

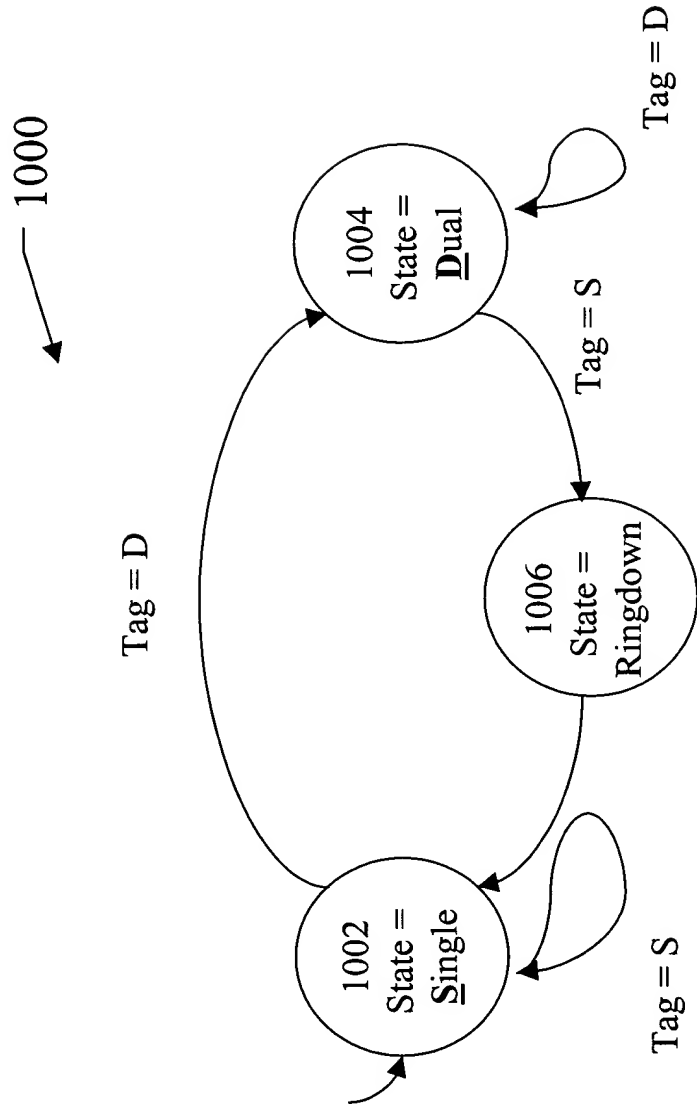


**Figure 8: TDVC to MELP Transcoder**



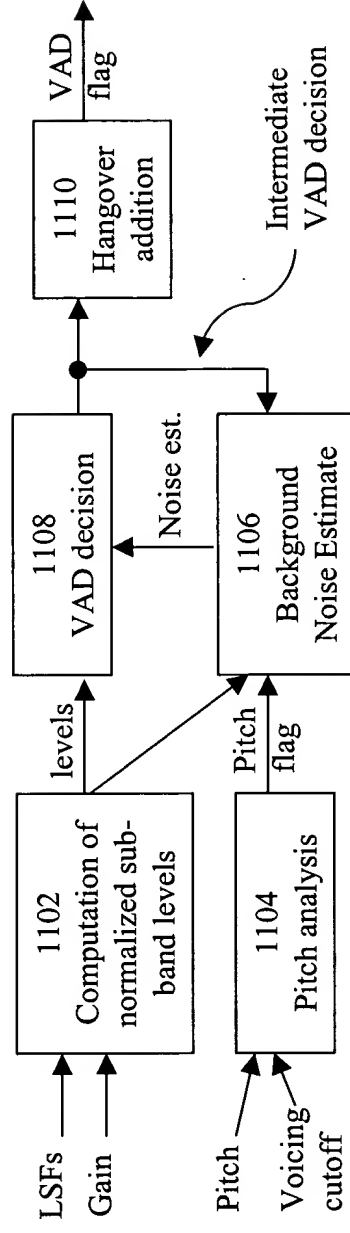


**Figure 9: Compressed Domain Conference Bridge**



**Figure 10: Dual Synthesizer State Diagram**

1100



**Figure 11: Compressed Domain Voice Activation Detector (CDVAD)**

4 bit quantizer table  
Frame 2

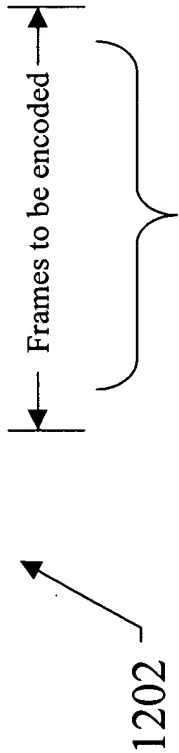
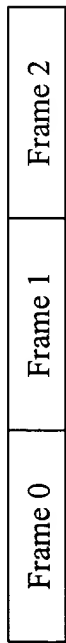
5 bit quantizer table  
Frame 1

L0
L3
L6
L9
L12
L16
L20
L24
L28
D-3
D-2
D-1
D+0
D+1
D+2
D+3

L0
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
L13
L14
L15
L16
L17
L18
L19
L20
L21
L22
L23
L24
L25
L26
L27
L28
L29
L30
L31

Figure 12B

time →

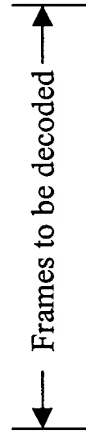
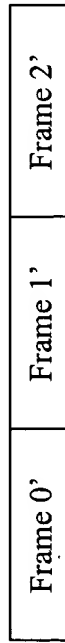


Frame T

Transmitted Frame  
Pitch value P

1204

time →



Transmitted Frame  
Pitch value P

Figure 12A